6. Measurement Data (continued)

6.9. Public Exposure to Radio Frequency Energy Levels ((1.1307 (b)(1)) RSS-GEN, ISSUE 5, RSS 102)

6.9.1. 1.1307 (b) (1) Public Exposure

Requirement: Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess of the Commission's guidelines.

Frequency (MHz)	MPE Distance (cm)	DUT Output Power (dBm)	DUT Antenna Numeric Gain (dB)	Power Density (mW/cm^2)	Limit (mW/cm2)	Result
	(1)	(2)	(3)	(4)	(5)	
915.0	20	-1.91	0	0.0001282	0.61	Compliant
824.2	20	23.97	2.512	0.0884973	0.55	Compliant
			SUM	**0.0886255**	**0.55**	

$$PD = \frac{OP + AG}{(4 \times \pi \times d^2)}$$

- PD = Power Density (mW/cm^2)
- OP = DUT Output Power (dBm)
- AG = DUT Antenna Gain (dBi)
- d = MPE Distance (cm)

1. Reference CFR 2.1091: For purposes of this section, a mobile device is defined as a transmitting device designed to be used in other than fixed locations and to generally be used in such a way that a separation distance of at least 20 centimeters is normally maintained between the transmitter's radiating structure(s) and the body of the user or nearby persons.
2. Table 6.2 of this test report. Converted from field strength measurements.
3. Included in field strength measurement.
4. Power density is calculated from field strength measurement and antenna gain.
5. Reference CFR 1.1310, Table 1: Limits for Maximum Permissible Exposure (MPE), Section (B): Limits for General Population/Uncontrolled Exposure. Limit = f/1500, where f is in MHz.

Results: Passed - The device under test meets the exclusion requirement detailed for a device with a separation distance of 20 cm.

Compliance Worldwide, Inc. - 357 Main Street - Sandown, NH 03873
(603) 887 3903 Fax (603) 887 6445
www.complianceworldwide.com

6. Measurement Data (continued)

6.9. Public Exposure to Radio Frequency Energy Levels ((1.1307 (b)(1)) RSS-GEN, ISSUE 5, RSS 102)

6.9.2. RSS-102 Issue 5 Requirements

Requirement: Requirement: RF exposure evaluation is required if the separation distance between the user and/or bystander and the device's radiating element is greater than 20 cm, except when the device operates as follows:

at or above 300 MHz and below 6 GHz and the source-based, time-averaged maximum e.i.r.p. of the device is equal to or less than $1.31 \times 10^{-2} \times f^{0.6834}$ W (adjusted for tune-up tolerance), where f is in MHz.

Results: Compliant

Frequency	Separation Distance	Maximum Power[1]		RSS-102 Exemption Limit[2]	Result
(MHz)	(cm)	(mW)	(Watts)	(Watts)	
915.0	≥ 20	0.39	0.00039	1.38	Compliant
824.2	≥ 20	444.84	0.44484	1.29	Compliant
		SUM	**0.44523**	**1.29**	

[1] Reference Section 6.2 of this report.

[2] Reference RSS-102, § 2.5.2 Exemption Limits for Routine Evaluation – RF Exposure Evaluation for distances greater than 20 cm.

The following formula was used to determine the exemption limit (W):

$1.31 \times 10^{-2} \times f^{0.6834}$ (f = frequency (MHz))

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